CALCIUM CITRATE is a calcium organic salt. Calcium citrate is better absorbed by the body than inorganic salts (calcium carbonate, calcium phosphate, and common calcium contained preparations).

In comparison with other calcium salts, calcium citrate has its own pharmacokinetics differences. Calcium is from the intestine in a soluble ionized form absorbed. Preparation reconstitution is better in acidic conditions of the stomach. Solvable ionized calcium reaches into all tissues well, reaches placental barrier. It is removed from the body with the feces primarily and about 20% with urine.

DRONE BROOD is a hormones donator of estradiol, prolactin, testosterone, progesterone - entomological sex hormones that affect the male and female reproductive function in a stimulating way. Drone brood is composed of vitamins, amino acids, macro-and micronutrients, as well as prohormones which are not referred to hormone replacers. It has a stimulating effect on the central mechanisms, regulating the androgens formation speed, it shows high efficiency at hormonal disorders, excluding the possibility of replacement therapy. In the Ryazan region, Rybnoe city, the Research Institute of Beekeeping on the drone brood were the research conducted which proved the absolute safety of its use. In addition, the same researches have shown that the use of drone brood causes the honadotrophic effect, at which the hormonal disorders, excluding the possibility of replacement therapy. In the Ryazan region, Rybnoe city, the Research Institute of Beekeeping on the drone brood were the research conducted which proved the absolute safety of its use. In addition, the same researches have shown that the use of drone brood causes the honadotrophic effect, at which the important to say, that the drone brood has a high content of vitamin D, and in general is saturated with vitamins. (+Apitherapy theory and preparation+ Moscow, 2007. Krivtsov N.I. and others.)

All this obviously indicates that the use of this preparation is able to increase the calcium replacement in body. This mechanism is as follows: the use of its compounds is focused on additional calcium introduce into the body, and simultaneous drone brood introducing helps to retain calcium in the body and use it exactly according to the instruction, owing to androgens levels control.

Important to say, that the drone brood has a high content of vitamin D, and in general is saturated with vitamins. (+Apitherapy theory and preparation+ Moscow, 2007. Krivtsov N.I. and others.) This contributes to the fact that the level of calcium preparation absorption increases, and herewith it’s not important to administer an additional vitamin D. Simultaneous use of drone brood and calcium compounds with a daily intake helps to reduce the calcium compounds use. Such a dosage reduction will reduce the stone formation in kidneys possibility and rid the body of calcium deposits (hypercalcemia).

DRONE BROOD CHEMICAL COMPOSITION
10-20% of proteins; 5-6.3 % of fats 11.4% of amino acids; 3.18-5% of glucose; fructose, sucrose up to 0.5%.

Microelements (mg%): K 0.50, Na 38, Ca 14, P 189, Mg 2, Fe 3.23, Mn 4.40, Zn 5.54, Cu 2, Cr, Co, Ni, Ag, Au and others.

Vitamins (water- and fat soluble): A 0.54 IU/g; 0.297mg% of xanthophyll; 0.426 IU/g of B-carotene; B2 0.739mg%; D 950 IU/g; 442.3 mg% of choline; nicotinic acid, 15.8 mg%.

Amino acids: lysine; histidine; arginine; aspartic acid; threonine; serine; glutamic acid; proline; glycine; alanine; valine; methionine; isoleucine; leucine; tyrosine; fenilalanin; cysteine. (N.I. Krivtsov Apitherapy theory and preparations. Moscow 2007).

A low ability forming kidney stones is an important calcium citrate feature, which is important for continuous treatment. This is because the citrate salt reduces the amount of oxalate in urine. The citrate calcium salt is highly soluble and absorbed in the digestive tract, resulting in a good calcium absorption in the body and surely the preparation effectiveness in his prophylactic or therapeutic use.

It should be noted that calcium absorption is slowed down for different digestive system pathologies, pancreatic and thyroid glands. Basing on the conducted in many countries results of studies, including Russia and Ukraine, the calcium citrate high efficiency was confirmed.

OSTEOMED TABLETS №60

It is not a medication.
**Work Objective**

Investigation of the effectiveness of the new calcium-containing osteoprotector named «Osteomed» on the increase of callus formation for fractures.

**Material and Methods**

300 patients were selected for the study (112 men and 188 women) aged from 18 to 62 years, with the most common fracture - fracture of the distal metaepiphysial of radial bone and fracture ankle joint lateral malleolus. The patients were divided into 3 groups:

<table>
<thead>
<tr>
<th>Group 1 (122 patients)</th>
<th>Group 2 (103 patients)</th>
<th>Group 3 (75 patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECEIVED:</td>
<td>RECEIVED:</td>
<td>DID NOT RECEIVE CALCIUM PREPARATIONS</td>
</tr>
<tr>
<td>«Osteomed»</td>
<td>«Calcium 3D Nycomed»</td>
<td></td>
</tr>
<tr>
<td>three tablets 2 times a day</td>
<td>1 tablet 2 times a day</td>
<td></td>
</tr>
</tbody>
</table>

Radiological control was performed to everyone before the casting and 3 weeks after plaster removal. All patients were received foods that are high with calcium. Medium terms of fractures immobilization were chosen for the study - 4 weeks.

**Investigation Results**

Callus formation was not observed at patients who were not taking calcium preparation (callus formation was traced only at 5th week).

The weak consolidation, callus was not traced (callus formation was traced only in the 4-5 week of immobilization) was observed at patients taking «CaD3 Nycomed».

Callus was observed on radiographs in most of patients who were taking «Osteomed».

These results suggest that patients taking «Osteomed» could begin rehabilitation after 3 weeks of injury and a month after the injury get to work.

Patients who took «CaD3 Nycomed» could begin rehabilitation only 4 weeks after the injury and get to work after 1.5 months.

Patients, who did not take calcium preparations, began to rehabilitate only 1.5 month after, and got to work 2 months after injury.

**Conclusions**

“Osteomed” taking by patients with fractures reduces periods of immobilization. This allows rehabilitating earlier and getting to work.